Energy Systems worksheet

1. What does ATP stand for?
2. Describe it's structure.
3. Where is the energy stored in ATP?
4. How much energy is released from one ATP molecule?
5. Using a diagram, describe what happens to an ATP molecule? What enzyme acts on it?
6. What happens to the left over ADP?
7. Name the 3 systems used to recycle ATP.
8. Using diagrams discribe the first system which is called into action.
9. What is the fuel source? Where do they come from?
10. What enzyme breaks it down?
11. Describe the net yield for this system.
12. How long does this system last in high intensity exercise?
13. What types of events would rely on this system?.
14. Describe the rate limiting factors for this system:
15. Name the second system? What are the fuel sources? Where do they come from?
16. What is the waste product associated with this system?
17. What is the net yield for the second stage and how long does it last in a high intensity event?
18. Describe the rate limiting Factors for this system.
19. Name and Describe the final system. What alterations have to be made in the body for this system to be efficient?
20. What are the fuel sources? Where do they come from?
21. The recycling of ATP though this system is called.....?
22. At what point in a high intensity event does this system kick in? how long does it last?
23. What types of events would rely on this system?
24. How does the presence of Oxygen affect this system (A) at the beginning? (B) at the end?
25. What high energy molecules are shuttle from the Krebs cycle to the Electron Transport Chain?
26. What are the waste products for this system?
27. What is the net yield for this system?
28. Describe the rate limiting factors for this system.
29. Can the limiting factors here be altered?
30. What is the best source of fuel for the final system? Why
31. Why is protein not a good source of energy?